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| INFORMATION DISCLOSURE | | | | Application Number | 10/828,486 | | |
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| STA | STATEMENT BY APPLICANT | | | First Named Inventor | Anderson, Robert L. | | |
| | | | | Art Unit | 2912 | | |
| (use as many sheets as necessary) | | | s necessary) | Examiner Name | GHYLA | | |
| Sheet | 1 | of | | Attorney Docket Number | 019930-003710US | | |

| | Γ | Document Number | U.S. PATENT DO | | |
|--------------------------|--------------|---|--------------------------------|--|---|
| xaminer Initials | Cite No.1 | Number Kind Code ² (# known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| KZ. | AA | US-5,212,582 | 05/18/1993 | Nelson | |
| 1 | AB | US-5,600,383 | 02/04/1997 | Hombeck | |
| 7 | AC | US-5,960,133 | 09/28/1999 | Tomfinson | |
| | AD | US-6,028,689 | 02/22/2000 | Michalicek et al. | |
| | AE | US-6,040,935 | 03/21/2000 | Michalicek | |
| | AF | US-6,128,122 | 10/03/2000 | Drake et al. | |
| | AG | US-6,140,144 | 10/31/2000 | Najafi et al. | |
| | AH | US-6,232,150 B1 | 05/15/2001 | Lin et al. | • |
| | Al | US-6,307,657 B1 | 10/23/2001 | Ford | |
| | AJ | US-6,346,189 B1 | 02/12/2002 | Dai et al. | |
| | AK | US-6,352,933 B1 | 03/05/2002 | Forbes et al. | |
| | AL | US-6,437,432 B2 | 08-20-2002 | lkumo et al. | |
| | AM | US-6,469,330 B1 | 10/22/2002 | Vigna et al. | |
| | AN | US-2001/0021570 A1 | 09/13/2001 | Lin et al. | |
| | ВО | US-2003/0174929 A1 | 09-18-2003 | Rodgers et al. | |
| AC | BP | US-2003/0173112 A1 | 09-18-2003 | Barnes et al. | |
| $\overline{\overline{}}$ | BQ | US- | | | |
| | BR | US- | | | |
| | 85 | US- | | | |
| | ВТ | US | | | |
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|--------------------|--------------|----------------------------------|--|------------|------------------|---|--|----------------|
| Examiner Initials* | Cite No.1 | Fon Country Code ³ | eign Patent Doo Number ⁴ | | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | BV | | | | | | | |
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| Substitute for form 1449B/PTO | | | | Complete if Known | | | |
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| STAT | STATEMENT BY APPLICANT | | | First Named Inventor | Anderson, Robert L. | | |
| | | | | Art Unit | 2012 | | |
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| Sheet | 2 | of | | Attorney Docket Number | 019930-003710US | | |

| | | NON PATENT LITERATURE DOCUMENTS | |
|------------------------|--------------|---|-----|
| Examiner Initials * | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T 2 |
| Al | СС | AKIYAMA, TERUNOBU et al., Controlled Stepwise Motion in Polysilicon Microstrucures, Journal of Microelectromechanical Systems, Vol. 2, No. 1, September 1993, pp 106-110 | |
| | CD | ASHRUF, C.M.A. et al., Galvanic Porous Silicon Formation Without External Contracts, Elsevier Science S.A., Sensors and Actuators 74 (1999), pp 118-122. | |
| | CE | BEAN, KENNETH E., Anisotropic Etching of Silicon, IEEE Transactions on Electron Devices, Vol. ED-25, No. 10, October 1978, pp 1185-1193. | |
| | CF | CIARLO, Dino R., A Latching Accelerometer Fabricated by the Anisotropic Etching of (110) Oriented Silicon Wafers, 0860-1317/92/010010+04104.50, March 1992 IOP Publishing Ltd. | |
| | ÇG | DEWA, Andrew S., et al., Development of a Silicon Two-Axis Micromirror for an Optical Cross-Connect, Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 4-6, 2000, pp. 93-96. | |
| | СН | FORD, JOSEPH E. et al., Wavelength Add-Drop Switching Using Tilting Micromirrors, Journal of Lightwave Technology, Vol. 17, No. 5, May 1999, pp. 904-911 | |
| · | CI | GRADE, John D., et al., A Large-Deflection Electrostatic Actuator for Optical Switching Applications, Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 4-6, 2000, pp. 97-100 | , |
| | ငၪ | HOPKINS, Robert E., Some Thoughts on Lens Mounting, Optical Engineering, Vol. 15, No. 5, September-October 1976, pp. 428-430. | |
| | СК | KAAJAKARI, VILLE, et al., Ultrasonic Actuation for MEMS Dormancy-Related Stiction Reduction, In MEMS Reliability for Critical Applications, Proceedings of SPIE Vol. 4180, 2000, pp. 60-65. | |
| | CL | KOCH, T.L. et al., Anisotropically Etched Deep Gratings for InP/InGaAsP Optical Devices, Journal of Applied Physics 52 (8), October 15, 1987, pp. 3461-3463. | |
| _ | СМ | SCHILLING, M. et al., Deformation-Free Overgrowth of Reactive Ion Beam Etched Submicron Structures in InP by Liquid Phase Epitaxy, Applied Physics Lett. 49 (12), September 22, 1986, pp. 710-712 | |
| | CN | TANG, WILLIAM C., et al., Electrostatically Balanced Comb Drive for Controlled Levitation, Reprinted from Technical Digest IEEE Solid-State Sensor and Actuator Workshop, June 1990, pp. 198-202 | |
| | со | TORCHEUX, L. et al., Electrochemical Coupling Effects on the Corrosion of Silicon Samples in HF Solutions, J. Electrochem. Soc., Vol. 142, No. 6, June 1995, pp.2037-2046 | |
| | СР | VAN KESSEL, PETER F. et al., A MEMS-Based Projection Display, Proceedings of the IEEE, Vol. 86, No. 8, August 1998, pp. 1687-1704 | |
| | ca | KELLER, CHRISTOPHER, Microfabricated Silicon High Aspect Ratio Flextures for In-Plane Motion, Dissertation submitted to University of California, Berkeley, Fall 1998 | |
| AC | CR | MULLER, LILAC, Gimballed Electrostatic Microactuators with Embedded Interconnects, Dissertation submitted to University of California, Berkeley, Spring 2000 | |

| Examiner Signature | Date Con | sidered / 12/0 4 |
|-----------------------|----------|------------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with pext communication to applicant.

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| amu 17 | 2004 6 | | | | , | Art Unit | 2836 2812 | |
| יייטון | 3 | (use as man | y sheel | ts as | necessary) | Examiner Name | GHYKA | |
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| 727 | AA | US-5,847,381 | 12-08-199 | 8 | T. Isogai | |
| Al | AB | US-6,747,340 B2 | 06-08-200 | 4 S. I | Barnes, et al. | |
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| | Application Number | 10/828,486 | | | |
| INFORMATION DISCLOSURE | Filing Date | April 19, 2004 | | | |
| STATEMENT BY APPLICANT | First Named Inventor | Anderson, Robert L. | | | |
| | Art Unit | 2830 7812 | | | |
| (use as many sheets as necessary) | Examiner Name | GHYKA | | | |
| Sheet 2 of 2 | Attorney Docket Number | 019930-d03710US | | | |

| | | NON PATENT LITERATURE DOCUMENTS | |
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| Examiner Initials * | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Τ, |
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